

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

NOTES ON THE FISHES OF CRAB CREEK, WASHINGTON, WITH DESCRIPTION OF A NEW SPECIES OF TROUT.*

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Reports having come to the Bureau of Fisheries from time to time of the presence of a peculiar and interesting trout in Crab Creek, Washington, it was decided to secure specimens of it whenever a suitable opportunity presented itself.

In the summer of 1908, while Mr. Nichols was engaged in studying the operation of the salmon wheels on the Columbia River, advantage was taken of his presence in that part of the country to visit Crab Creek, make a study of the local conditions and collect specimens of the trout and other fishes inhabiting that stream. Accordingly on July 29 Mr. Nichols, accompanied by Mr. Ruskin Lhamon as temporary assistant, drove from Ritzville northward about 12 miles to Rocky Ford where Crab Creek was examined and collections made. The road from Ritzville is through a very dusty rolling grain country. At the point visited Crab Creek runs in the bottom of a coulée apparently cut by a much larger stream. Along its immediate banks is a green strip of small trees and shrubs, willows, poplars and alders, but the rocky slopes and ledges of the coulée rise toward the upland, uncultivated and scantily clothed with grey-green, rank-smelling sage brush, dazzling to the eye under the desert sun. The water of the stream was clear and cold, about 53° Fahrenheit. Its shallows were overgrown with water crowfoot in flower.

Several species of wading birds were observed, such as kildeers

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which were especially common and noisy, and kingfishers which were much in evidence.

Crab Creek has its rise near the western line of Spokane County, Washington. Its general course is westerly until it reaches the vicinity of the lower end of the Grand Coulée. It then turns southward toward Moses Lake. At the little town of Odessa, again just below the mouth of Wilson Creek (its principal northern tributary), and probably at other places, the creek sinks, usually to reappear further down. During high water it sometimes reaches Moses Lake, though it is said usually not to do so. At the lower end of Moses Lake are great sand dunes and sandy wastes placed across the old drainage channel of the creek. Through these the water seeps to reappear on the surface at intervals between the dunes and the Columbia which the waters finally reach. Although it is quite certain that at one time previous to the late pleistocene, Crab Creek flowed into the Columbia, it evidently has not done so for many years.

In its upper reaches the water is pure and sweet, but just above Moses Lake, according to Lieut. Symons,* it becomes somewhat alkaline. That of Moses Lake is stagnant alkaline, and unfit for drinking. Below the lake the water is alkaline, filled with organic matter, and unpalatable.

The water of the creek stood in deep, still pools the largest of which was thirty feet or more across and ten feet or so in depth. Between the pools were shallows where the current was not very strong, and only a few miles up stream from the largest pool, the creek became a mere rill which one could almost step across. Persons living in the neighborhood said that varying volume from point to point along its course was characteristic of Crab Creek.

Trout were found in considerable abundance but, probably owing to an abundant food supply, they did not take the fly or baited hook with any avidity. Young trout two to three inches long were abundant in the creek and some were found in an irrigating ditch which received its water from the creek.

Three days were devoted to an examination of the creek and only four species of fishes were obtained.

* Report of an examination of the Upper Columbia River by Lieut. Thomas W. Symons, Ex. Doc. 186, 47th Cong. 1st Session.

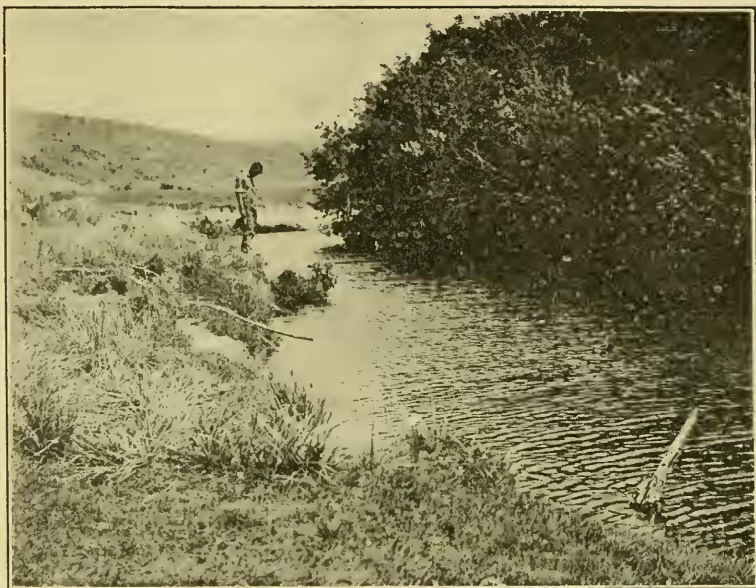


Fig. 1.



Fig. 2.

Figs. 1 and 2. Crab Creek near Rocky Ford, 12 miles north of Ritzville, Wash.
Type locality of *Salmo eremogenes* Evermann and Nichols.

